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ANNOUNCEMENT BY MINISTER OF AGRICULTURE.

The Schools of Agriculture have been established specially to give to the farmer's son and the farmer's daughter that type of education which will better fit them for their business in life, that of agriculture. The main object of the instruction in these schools is to give the students such knowledge and practice as will enable them to make farming a more pleasant and more profitable occupation. In the preparation of the course of study, the Board of Agricultural Education has kept the practical end in view, viz., the training of men for the actual practice of farming; nevertheless, it has not been forgotten that agriculture is a science as well as an art or business, and that it is highly important that the men engaged in farming to-day should have a good basis of training in science. Every progressive country in the world is recognizing the necessity of giving its boys and girls the best possible educational advantages as a preparation for whatever occupation in life they may follow. The Government of the Province of Alberta in establishing these schools recognizes that special educational facilities should be provided for that large proportion of the population which must naturally engage in the greatest profession of the Province. With the assistance and co-operation of the farmers, however, these Schools of Agriculture are doing a wide and important work besides simply giving instruction in the class-room. They have become centres where problems of soil and live stock are worked out; where experiments are tried and theories proven or disproven; where by practical co-operation the farmers of the Province may learn not only from their own experience, but from the experience of others as well. Since these schools are in a very special sense the institutions of the farmers of Alberta, the Department of Agriculture, and the Principals and Instructors in the schools, desire the assistance of every progressive farmer in the Province in making them the success which the agricultural possibilities of Alberta warrant.

DUNCAN MARSHALL,
Minister of Agriculture.

ACADEMIC CALENDAR, 1921-1922

School commences	Thursday, October 27th, 1921
Christmas Vacation	Thursday, December 22nd, 1921
Spring Term commences	Tuesday, January 3rd, 1922
Spring Term ends	Friday, March 31st, 1922

THE BOARD OF AGRICULTURAL EDUCATION.

The following extracts will explain how the Board is constituted and the purpose for which it has been established:

"An Act respecting Schools of Agriculture (Chapter 11, 1913, 1st Session.) . . . . . .

"Section 7. There shall be and is hereby constituted a Board of Agricultural Education to be composed of nine members, three of whom shall be graduates of an Agricultural College, to be appointed by the Lieutenant Governor in Council.

. . . .

"Section 15. The Board together with the Minister shall prepare the scheme of practical and scientific work to be done by students attending each and every school, shall prescribe the course of study, appoint examiners, and shall in addition be an advisory Board to aid the Minister in all agricultural educational work."

MEMBERS

H. M. Tory, D.Sc., LL.D., F.R.S.C.
Chairman.

W. L. Carlyle, B.S.A., Calgary.
E. L. Richardson, Esq., Calgary.
J. H. McArthur, Esq., Milnerton.
D. W. Warner, Esq., Edmonton.
L. Hutchinson, Esq., Duhamel.
Miss Isabel Noble, Daysland.
E. A. Howes, B.S.A., Edmonton.
W. J. Stark, Edmonton.

A. E. Meyer, LL.B., Edmonton,
Superintendent of Agricultural Schools.

Staff and Students, Claresholm

TEACHING STAFF

CLARESHOLM SCHOOL

J. C. Hooper, M. A.,
Principal, Instructor in Science.

Gordon B. Walker, B.S.A.,
Farm Manager, Instructor in Animal Husbandry and Poultry.

Will Lawler, Toronto Tech. Institute,
Instructor in Farm Mechanics.

O. McConkey, B.S.A.,
Instructor in Field Husbandry.

G. A. Richardson, B.S.A.,
Instructor in English and Mathematics.

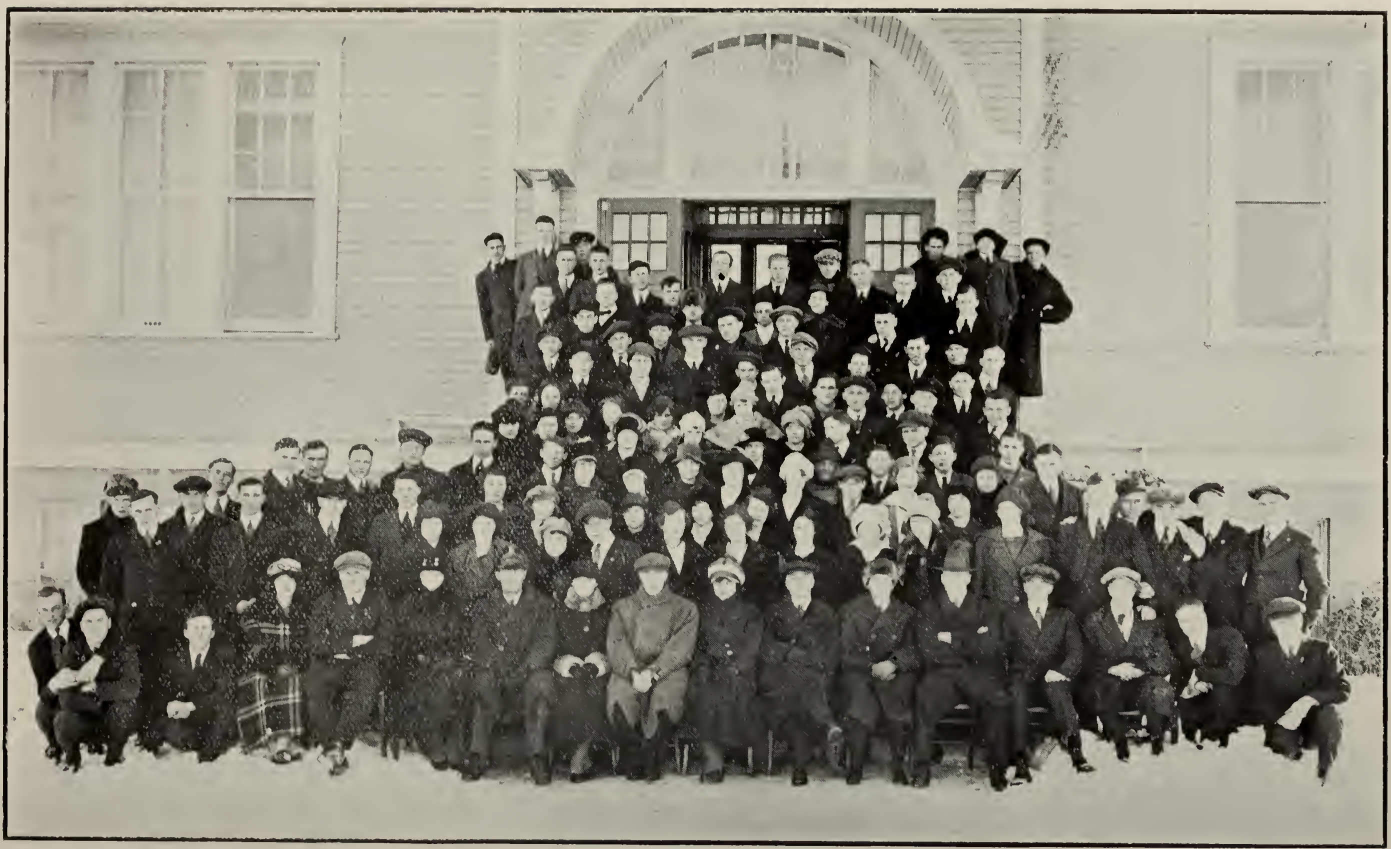
Miss Alice M. Jackson,
Instructor in Home Economics.

Miss Nellie Allely,
Instructor in Home Economics.

(To be appointed),
Instructor in Home Nursing.

Dr. P. R. Talbot, Provincial Veterinarian,
Dr. C. E. Buchanan,
Instructors in Veterinary Science.

H. S. Pearson,
Instructor in Dairying.



School Group on Front Steps, Olds

TEACHING STAFF

OLDS SCHOOL

F. S. Grisdale, B.S.A.,
Principal and Instructor in Field Husbandry.

C. A. Weir, B.S.A.,
Farm Manager and Instructor in Animal Husbandry.

G. R. Holeton, B.Sc.,
Instructor in Mechanics.

(To be appointed),
Instructor in Science.

M. W. Malyon, B.S.A.,
Instructor in English and Mathematics.

Miss A. I. Lammiman,
Instructor in Home Economics.

Miss Christine McIntyre,
Instructor in Home Economics,

(To be appointed),
Instructor in Home Nursing.

Dr. P. R. Talbot, Provincial Veterinarian.
Dr. W. G. Moore,
Instructors in Veterinary Science.

Miss A. Macdonald,
Instructor in Dairying and Poultry.

Staff and Students, Vermilion

TEACHING STAFF

VERMILION SCHOOL

J. C. McBeath, B.S.A.
Principal and Instructor in Field Husbandry.

E. H. Buckingham, B.S.A.,
Farm Manager and Instructor in Animal Husbandry.

John MacKenzie, B.S.A.,
Instructor in Farm Mechanics.

J. J. Loughlin,
Instructor in English and Mathematics.

N. C. Qua, M.A.,
Instructor in Science.

Miss Hattie M. Gowsell,
Instructor in Home Economics.

Miss Annie P. Scott,
Instructor in Home Economics.

(To be appointed),
Instructor in Home Nursing.

Dr. W. J. Moon,
Instructor in Veterinary Science.

G. W. Scott,
Instructor in Poultry and Dairying.

TEACHING STAFF

GLEICHEN SCHOOL

G. B. Bodman, B.S.A.,
Principal, and Instructor in Science.

M. L. Freng,
Farm Manager and Instructor in Animal Husbandry.

Hector McArthur, B.S.A.,
Instructor in Field Husbandry.

W. J. Hoover,
Instructor in Farm Mechanics.

P. A. MacDougall, B.A.,
Instructor in English and Mathematics.

Miss Florence M. Morton,
Instructor in Home Economics.

Miss E. J. Fee,
Instructor in Home Economics.

(*To be appointed*),
Instructor in Home Nursing.

Dr. P. R. Talbot, Provincial Veterinarian,
Dr. C. McPherson,
Instructors in Veterinary Science.

W. J. Beckett,
Instructor in Dairying.

(*To be appointed*),
Instructor in Poultry.

E. E. Eisenhauer, B.S.A.,
Instructor in Irrigation.

TEACHING STAFF

RAYMOND SCHOOL

O. S. Longman, B.S.A.,
Principal and Instructor in Field Husbandry.

W. D. Hay, B.S.A.,
Farm Manager and Instructor in Animal Husbandry.

(To be appointed),
Instructor in Science.

(To be appointed),
Instructor in Farm Mechanics.

W. S. Benn,
Instructor in English and Mathematics.

Miss Jessie I. De Guerre,
Instructor in Home Economics.

Miss Winnifred Suttaby,
Instructor in Home Economics.

(To be appointed),
Instructor in Home Nursing.

H. S. Pearson,
Instructor in Dairying.

(To be appointed),
Instructor in Poultry.

(To be appointed),
Instructor in Veterinary Science.

E. E. Eisenhauer, B.S.A.,
Instructor in Irrigation.

TEACHING STAFF

YOUNGSTOWN SCHOOL

R. M. Scott, B.A.,
Principal and Instructor in English and Mathematics.

(*To be appointed*),
Farm Manager and Instructor in Animal Husbandry and Poultry.

B. J. Whitbread, B.S.A.,
Instructor in Field Husbandry.

Miss P. C. Stanford, B.S.A.,
Instructor in Science.

J. C. Talbot,
Instructor in Farm Mechanics.

Miss Mary N. Scott,
Instructor in Home Economics.

(*To be appointed*),
Instructor in Home Economics.

(*To be appointed*),
Instructor in Home Nursing.

Dr. P. R. Talbot, Provincial Veterinarian,
Dr. W. J. Moon,
Instructors in Veterinary Science.

W. J. Beckett,
Instructor in Dairying.

Arrangements have been made with the following gentlemen to give special lectures along their respective lines of work at the various schools:

HON. DUNCAN MARSHALL,
Minister of Agriculture.

DR. H. M. TORY,
President, University of Alberta.

MR. H. A. CRAIG, B.S.A.,
Deputy Minister of Agriculture.

E. A. HOWES, B.S.A.,
Dean, Faculty of Agriculture, University of Alberta.

MR. S. G. CARLYLE,
Live Stock Commissioner.

MR. C. P. MARKER,
Provincial Dairy Commissioner.

MR. ALEX. GALBRAITH,
Superintendent of Fairs and Institutes.

MR. J. MCCAIG, M.A., LL.B.,
Editor of Agricultural Publications.

Other lecturers will visit the schools as arrangements are made from time to time.

Provincial Soil Investigational Work Being Conducted By Schools of Agriculture Under Direction

OF

F. S. Grisdale, B.S.A.,
Olds, Alberta.

At each Provincial School of Agriculture considerable experimental work is conducted. The Province of Alberta is large and its soil and climatic conditions are varied. Methods of farming, therefore, must also be varied in order to be successful; and the conduct of experimental work at each Provincial School of Agriculture, located, as they are, in various districts throughout the Province, makes possible the discovery of the most successful methods.

Students and farmers may secure, therefore, at the Schools of Agriculture in their district, information which applies directly to their own conditions. This is a great advantage to both students and parents because it familiarizes them with the methods which pay the best. This system of agricultural education was not in vogue when the agricultural colleges were started in the other provinces of Canada and in the various states in the United States. At these places there is only one central institution at which investigational work is conducted and consequently many students attending these institutions are not able to get information which applies to their own farms. In Alberta, however, agricultural students may go to an institution which has information of direct financial interest to them.

Experimental work, accordingly, constitutes an important and increasingly growing phase of the work of the Schools of Agriculture. During the seven non-teaching months, certain members of the staffs at each school devote their time largely to experimental work. To acquire knowledge is quite as much the duty of the Schools of Agriculture as to give instruction in the class room and by extension service.

Farming in Alberta

Several important points have already been learned. One point is that methods of farming which are recommended in the Western States are not always applicable in Alberta. Even though the amount of rainfall may be the same in both places, the value of the rain is much greater in the northern latitude. The amount of evaporation is much less in Alberta and the quantity of water required to produce a definite weight of crop is also much less. Thus, while it took 614 pounds in Colorado and 541 pounds in Wisconsin to produce one pound of dry matter of oats, in Alberta it took only 306 pounds of water. It is obvious that the methods of farming should not be the same in all places.

Another point is that all crops which do well in humid climates, do not do well in Alberta. Timothy, which is the most extensively grown hay crop in the East does not do well in Alberta; it is excelled by Brome and Western Rye grass. The following yields on the Experimental Plots at the Olds School of Agriculture for the last three years bring out this superiority of the latter grasses.

	1919	1918	1917
Timothy	.6 tons	.4 tons	3.9 tons
Western Rye Grass	2.5 tons	1.8 tons	2.9 tons
Brome Grass	3.3 tons	2.1 tons	4.0 tons

The above figures show that during the dry years of 1919 and 1918 the timothy did very poorly, while, in 1917, which had more rain and which had been preceded by an exceedingly wet autumn in 1916, it gave a good yield. However, Western Rye grass and Brome grass also gave good yields in 1917 and, moreover, gave large yields in the dry years. It is very important to get large yields in the dry years because in these years the prices are highest.

Problems Under Investigation

Experiments are being conducted at each School of Agriculture to learn the best varieties of grains and vegetables, the proper rates and dates of seeding, the crops which give the greatest yield of green feed and ensilage, and the most suitable crops for hay and pasture. Other experiments are conducted to learn the rotations which give the greatest financial returns, to find out the best cultural methods, and to discover the proper use of manure. These experiments are linked up with chemical analytical studies in order to make a more intelligent interpretation of the work. Experiments in the fields of biology and farm mechanics are being conducted. Dry farming methods which will overcome the effects of drought and reduce the losses in dry years are being extensively investigated.

Work in Bacteriology Undertaken by the Provincial Biologist, Mr. J. C. Hooper, M.A., Principal of the School of Agriculture at Claresholm, Alberta.

At the School of Agriculture, Claresholm, cultures for the inoculation of different kinds of legume seed are grown by the Provincial Biologist. It is a well established fact that each legume requires a particular kind of bacteria to produce the most vigorous growth of stems, leaves and seed. In order to introduce the necessary kind of bacteria into the soil in which a particular kind of legume is to be grown, the inoculation of the seed with a pure culture is recommended. From the first of April until the end of June these cultures are prepared for the inoculation of Alfalfa, Field and Garden Peas, Sweet Peas, Alsike, White Sweet Clover, White Dutch Clover, Red Clover, Crimson Clover, Yellow Sweet Clover and Soy Beans. Complete instructions for the use of these cultures are supplied with them. A charge of twenty-five cents is made for each bottle of culture, which contains sufficient bacteria to inoculate sixty pounds of seed. All orders accompanied by Postal Order should be addressed to "The Principal of the School of Agriculture, Claresholm."

Residents in the territory of the School of Agriculture, Claresholm, are requested to send to the Principal of the School of Agriculture, weeds, and other plants for identification. Methods of eradicating the weeds are given. Stockmen and ranchers who suspect loss of cattle, horses or sheep due to weed-poisoning, are invited to send specimens of plants under suspicion. A bulletin on "Weeds Poisonous to Livestock" was prepared recently by Dr. P. R. Talbot, V.S., Provincial Veterinarian, and J. C. Hooper, M.A., Provincial Biologist. This bulletin deals with the following poisonous weeds: Tall Larkspur, Low Larkspur, Death Camas, Water Hemlock, White Loco-Weed, Woolly Loco-Weed, and Showy Loco-Weed. Information is given for the identification of these weeds, and the symptoms and treatment of animals affected are described.

Copies of this bulletin may be obtained free on application to the Principals of the Schools of Agriculture; Mr. A. E. Meyer, Superintendent of Schools and Farms, Department of Agriculture, Edmonton, or Mr. J. McCaig, Publicity Commissioner, Department of Agriculture, Edmonton.

Residents in this district are asked also to send to the Principal of the School of Agriculture, Claresholm, specimens of insects which are found to be causing injury to vegetables, grains and other plants. Methods of controlling insects are given.

Plot experiments are being conducted at the School of Agriculture, Claresholm, with formalin, for the prevention of stinking or bunt smut of wheat, covered smut of barley, naked smut of oats, and covered smut of oats.

Plot experiments are being conducted in connection with the prevention of scab of potatoes and other fungus diseases.

Plot experiments are being conducted in connection with the growing of perennial flowers from seed and the growing of trees and shrubs from cuttings and seed.

It is hoped that useful information will be obtained from these and other experiments, the results of which will be published later.

GENERAL INFORMATION

The work of the Schools of Agriculture is divided into two main divisions, viz., Agriculture and Household Science. The work of the former department is organized specially from the point of view of the practical farmer and in the latter department from the point of view of the home-maker.

I.—Agriculture

This course aims to be eminently practical, embracing work in animal husbandry, field husbandry, and farm mechanics. Due attention will also be given to instruction in farm management, farm book-keeping, agricultural physics, chemistry, bacteriology, mathematics and English. The aim of the school is to make practical farmers of the young men who attend its courses. While a large share of the instruction will be given by the regular staff, valuable assistance will be rendered through special lectures delivered by men prominent in their respective branches of the Department of Agriculture and from the University of Alberta. The list of subjects taught during the second year does not vary much from that of the first year. The difference will be found to lie in the advanced nature of the work. The satisfactory completion of the first year's work entitles the student to enter the work of the second year; the satisfactory completion of the second year entitles the student to receive the Associate Diploma. The work covered during the two years, ending by the conferring of the diploma, is such as to furnish the standing demanded for entrance into the Faculty of Agriculture in the University of Alberta.

II.—Household Science

The aim of the Department of Household Science is to train the young women of the Province to be practical homemakers. The course covers a period of two sessions of five months each.

While the work of both sessions is conducted on distinctly practical lines aiming to secure the economic management of the home, the work of the first year is specially devoted to home problems and to the interests of those who have only one year to spare. The work of the second year is designed, in addition to the home-maker's course, to assist those who are preparing to be teachers in domestic science.

An arrangement has been made with the Department of Education of the Province by which teachers who have already had their Normal training shall receive certificates, which will enable them to teach not only the work of the ordinary school grades, but Domestic Science as well, while those who have passed Grade XI. of the schools but have not had Normal training will be permitted, after some special instruction in method, to teach Domestic Science only.

Girls' Cooking Class

Admission Requirements

1. The minimum age of admission to the schools for boys is sixteen, for the session beginning October, 1921; for girls, sixteen.

2. No entrance examination is required. The student must possess the knowledge and ability to profit by the work of the school.

3. The student must produce satisfactory evidence of moral character and physical health when requested by the Principal.

4. The school course is entirely free, but every student is required to make a deposit of $5.00 caution money to cover damage to furniture, apparatus, books, etc. This amount, less deductions (if any), will be refunded at the end of the session.

Text-books can be secured at the Schools.

Regulations

Smoking is not allowed on school premises.

Provision is made for the social life of students. This is wholly under control of the Principal.

Students are expected to attend religious service once each Sunday in such church as is prescribed by parent or guardian.

Students must devote a reasonable amount of time to evening study. In the matter of disposal of leisure time the students are responsible to the Principal.

Regular and punctual attendance at lectures and laboratory periods is required of each student. No student will be permitted to take the final examinations in any course if his absences exceed ten periods in courses of three periods a week throughout the session, six periods in courses of two periods a week, and four periods in courses of one period a week.

Students who are late for any lecture or school exercise will be marked absent upon the records of the instructor in charge, unless at the end of the period in question they account satisfactorily to the instructor for their lateness (in which case he will, without destroying the mark of absence, indicate his acceptance of the excuse by making an X over the A). The decision of the instructor shall be final.

Students will not be allowed to frequent pool rooms. Violation of this rule will be followed immediately by suspension from classes.

PRIZES

OFFERED FOR COMPETITION DURING SESSION 1921-1922

Claresholm School of Agriculture:

Western Retail Lumbermen's Association of Winnipeg, Man., offers the following prizes:

Girl Competitors

For the best drawing and most practical farm kitchen of average size:

1st Prize	$12.00	3rd Prize	$4.00
2nd Prize	7.00	4th Prize	2.00

Boy Competitors

For the best layout of medium farm home, area of which is not to exceed 1,000 square feet:

1st Prize	$12.00	3rd Prize	$4.00
2nd Prize	7.00	4th Prize	2.00

The Crown Lumber Company, of Calgary, offer $50.00 to the student who grows the best bushel of Alfalfa seed at the Claresholm School of Agriculture.

Olds School of Agriculture:

The P. Burns Prize of $50.00, offered by P. Burns, Esq., of Calgary, for competition in the Department of Agriculture at the Olds School.

The P. Burns Prize of $50.00, offered by P. Burns, Esq., of Calgary, for competition in the Department of Home Economics at the Olds School.

The Edmonton City Dairy Prize of $25.00 to the Olds School of Agriculture for general proficiency in dairy work at the School, together with an article on the sanitary production of milk.

Vermilion School of Agriculture:

The Edmonton City Dairy Prize of $25.00 to the Vermilion School of Agriculture for general proficiency in dairy work at the School, together with an article on the sanitary production of milk.

Western Retail Lumbermen's Association of Winnipeg, Man., offers the following prizes:

Girl Competitors

For the best drawing and most practical farm kitchen of average size:

1st Prize	$12.00	3rd Prize	$4.00
2nd Prize	7.00	4th Prize	2.00

Boy Competitors

For the best drawing and most practical plan of a farm barn for the average quarter or half-section farmer:

1st Prize	$12.00	3rd Prize	$4.00
2nd Prize	7.00	4th Prize	2.00

Gleichen School of Agriculture:

The Alberta Pacific Grain Co. offers a prize of $10.00 to the student who grows the best half-bushel of Marquis wheat, at the Gleichen School of Agriculture.

The Western Retail Lumbermen's Association, of Winnipeg, offers the following prizes to be competed for by Agricultural Students at the Gleichen School of Agriculture:

For the best drawing and most practical plan of a farm barn for the average quarter or half-section farmer:

1st Prize	$12.00	3rd Prize	$4.00
2nd Prize	7.00	4th Prize	2.00

Raymond School of Agriculture:

The Hon. A. McLean offers to both boys and girls of the Senior year, for General Proficiency:

A Prize of	$25.00

Open to all Schools of Agriculture in Alberta:

The Collicutt Copy, value $100.00 offered by Frank Collicutt, Esq., Calgary, for competition in stock-judging by teams of three boys from the Senior year in the Schools. Possession follows two successive wins.

AGRICULTURE

Courses of Study.

First Year.

1. Field Husbandry.
2. Animal Husbandry.
3. Veterinary Science.
4. Farm Mechanics.
5. Farm Dairying.
6. Poultry.
7. Horticulture. (Vegetable Gardening Floriculture).
8. Elementary Chemistry.
9. General Physics.
10. Botany.
11. Farm Management.
12. English.
13. Mathematics.
14. Entomology.

Second Year.

1. Field Husbandry.
2. Animal Husbandry.
3. Veterinary Science.
4. Farm Mechanics.
5. Farm Dairying.
6. Poultry.
7. Horticulture (Small Fruits, Forestry).
8. Agricultural Chemistry.
9. Agricultural Physics.
10. Botany.
11. English.
12. Mathematics.
13. Bacteriology.
14. Farm Management and Rural Economics.
15. Civics.

DETAILS OF COURSES

Field Husbandry

FIRST YEAR

(*A*) *Soils and Soil Cultivation.*—

Origin and classification of soils, relationship of texture, moisture, temperature, color, and bacteria to the producing power of the soil; the objects of cultivation; methods of cultivation for different soils under varying climatic and seasonal conditions; the use of various farm implements used in cultivation.---8 lectures.

(*B*) *Cereal Crops.*—

Methods of improvement:

(*a*) Their classification and history.
The plant and how studied from the standpoint of composition, structure, heredity, environment.

(*b*) The study of wheat, oats, barley and flax, under the following heads:

1. Special structure.
2. History.
3. Soil and its amendment.
4. Adaptability to climatic conditions.
5. Suitable varieties.
6. Selection and treatment of seed.
7. Dates of seeding.
8. Rates of seeding.
9. Depth of seeding.
10. Methods of seeding.
11. Tillering and method of modification.
12. Cultivation of growing crop.
13. Period of maturity at time of cutting.
14. Method of harvesting—stooking, stacking and threshing.
15. Storing and marketing.—14 lectures.

Grain Judging

(*C*) *Grasses, Clovers, Alfalfas, Forage and Root Crops.*—

In this course a few of the varieties of grasses, clovers, forage, ensilage and root crops best adapted for general culture in various parts of the Province will be studied in a manner similar to that adopted with cereals.—8 lectures.

(*D*) *The Eradication of Weeds.*—

What a weed is; classification of weeds; losses due to weeds; how weeds spread; general principles in the control and eradication of weeds; methods of eradication.—3 lectures.

(*E*) *Drainage.*—1 lecture.

(*F*) *Outline of Experimental Work conducted at the School in Field Crops.*—1 lecture.

(*G*) *Seed Selection.*—2 lectures.

Laboratory Exercises

(1) A complete study of the physical structure of wheat, oats, barley and flax plants.

(2) A study of variety characteristics in wheat, oats, barley and flax.

(3) *Judging Field Crops.*—Commercial judging and handling of grains, grasses, forage, and root crops.

(4) *Judging Seed Grain.*—The student will be made familiar with the score card in judging seed grain; practice is given in scoring, comparing, judging and selecting seed grain.—2 laboratory periods per week.

SECOND YEAR

(*A*) *Farm Crops.*—A concise review of first year's work. In addition, spring and fall rye, peas, rape, kale, buckwheat, millets, vetches, and a study of the various hay grasses, clovers and alfalfas, under headings similar to those outlined in the first year.—15 lectures.

(*B*) *Fertilizers.*—Classification of fertilizers; farm-yard manure: its properties, source, value, preparation, care and handling, application and economy; green manuring; commercial fertilizers: their sources, uses, application and economy.—4 lectures.

(*C*) *Seed Selection.*—Value of seed selection, method used in developing pedigreed seed, and a brief outline of the work of the Canadian Seed Growers' Association; Seed Control Act.—5 lectures.

(*D*) *Rotation of Crops.*—

(1) Rotation defined.
(2) Reasons for rotating crops.
(3) Rotation suitable to grain farming, to mixed farming.—3 lectures.

(*E*) *Eradication of Weeds.*—A continuation of the work of the first year.—3 lectures.

(*F*) *Irrigation.*—(Raymond & Gleichen). (Outline to be supplied).

Laboratory Exercises.—Judging and grading grains and grasses. Work of first year continued in judging with score card. Practice in selecting and comparing grass, clover and alfalfa seed, and in grading market wheat, oats, barley, peas and flax.—2 laboratory periods per week.

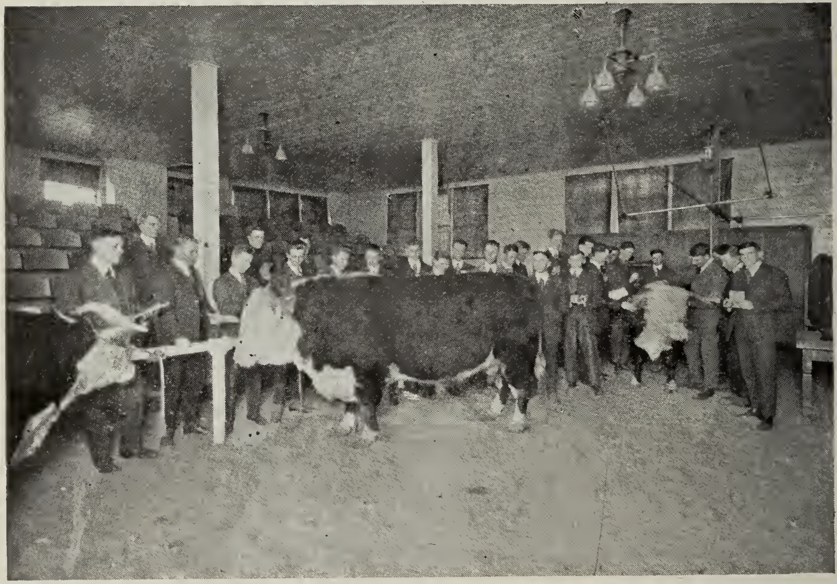
Animal Husbandry

First Year

(*a*) *Nutrients and Digestion.*—4 lectures.

(1) Brief and elementary discussion of food nutrients and their uses in the animal body, in order that the differences in the care and feeding of fattening, growing, milking and pregnant animals may be grasped intelligently.

(2) Digestive systems of ruminants and non-ruminants; digestion of food, and assimilation of food nutrients.



Judging Cattle

(*b*) *Necessity for Live Stock.*—3 lectures.

Live stock essential to permanent agriculture.

Types of live stock suited to the different sections of the province.

(*c*) *Care and Management.*—24 lectures.

General discussion of housing, care and feeding of all types of farm live stock.

(*d*) *Marketing Live Stock.*—3 lectures.

Necessary margin on fattening stock, shrinkage, market classes, ages at which to sell, etc.

(*e*) *Live Stock Judging.*—34 periods.

Laboratory work on all classes of live stock, horses, dairy cattle, beef cattle, swine and sheep.

Students to be encouraged to purchase Plumb's "Types and Breeding of Farm Animals."

SECOND YEAR

(*a*) *Breed History.*—20 lectures.

Discussion of the origin and history of the popular breeds of beef and dairy cattle, and horses, and a brief outline of the origin and character of the less well-known breeds.

(*b*) *Principals of Breeding.*—6 lectures.

Possibilities for live stock improvement; variability of all living matter; influence of selection; concentration of blood lines; its advantages and disadvantages; handling purebred, grade, crossbreds and scrubs; their relative advantages and disadvantages. The importance of an ideal and a constructive policy in the mind of the breeder.

(*c*) *Feeds and Feeding.*—21 lectures.

Resume of elementary principles covered in first year.

Composition and feeding values of available feeds.

Feeding standards.

Compounding and balancing rations; their relative costs per unit of feed.

(*d*) *Live Stock Records and Registration.*—1 lecture.

(*e*) *Live Stock Judging.*—34 laboratory periods.

Text books for Second Year:

Plumb's "Types and Breeds of Farm Animals."
Henry & Morrison's "Feeds and Feeding" (abridged).

Veterinary Science

FIRST YEAR

(*a*) *Anatomy.*—The structure of the animal body—bones, joints, ligaments, muscles, circulatory system, nervous system, internal organs.

(*b*) *Physiology.*—The functions of the animal body—digestion, respiration, excretion, blood-supply.

(*c*) *Stable Hygiene.*—Dietetics.

SECOND YEAR

(*a*) *Common Ailments of Farm Animals.*—Diagnosis, treatment, prevention.

(*b*) *Medicine.*—Simple remedies, their nature, uses and application.

(*c*) *Simple Surgery.*

(*d*) *Care of Animals during Gestation.*—Parturition.

(*e*) *Care of Horses' Feet and Horse-shoeing.*

(*f*) *Animal Parasites.*

Farm Mechanics

FIRST YEAR

(*a*) *Concrete Work.*—3 lectures and 5 laboratory periods. Composition and nature of cement. Methods of mixing and placing; form construction. The laboratory work will include the making of concrete posts, sidewalk blocks, laying cement floors, etc.

(*b*) *Carpentry.*—24 laboratory periods. Lectures on tools and materials. Shop-work will include the following:

Squaring up stock, chamfering, the manufacture of coat-hangers, nail-boxes, book-stalls, taborets, mortise-joints, the cutting of rafters. Supplementary exercises will be offered as follows: Trestles, hall tree, milk stool, hand sleigh, step ladder, neck yoke and whiffletrees. The aim of this course will be to familiarize the student with the care and use of tools and at the same time produce useful articles.

(*c*) *Blacksmithing.*—24 laboratory periods.

Lectures on tools, materials and the care and manipulation of the fire. The forge practice will include the making of staples, gatehook, chain links, welded rings, whiffletree irons, neck yoke irons, two-piece weld, waggon hammer, cold chisel, hand punch, centre punch and cape chisel. Supplementary exercises will also be made if time permits. These will include fire tools, harness hooks, flat wrench, hay hook, etc.

Farm Blacksmithing

(*d*) *Gas Engines and Farm Motors.*—14 lectures and 9 laboratory periods.

Lectures will be given on the two-stroke cycle and four-stroke cycle types of engines, fuels, carbureters, ignition systems, lubrication, cooling, governing. Gas engine troubles and the selection of an engine will also be dealt with. Study of the gas tractor; operation of tractor, accompanied by brake tests; discussion of initial operating and maintenance costs, and allowance for depreciation; principles of power transmission.

The laboratory work includes the operation of small types of tractors, the location of trouble and the application of electricity in connection with cells, induction coils and magnetos.

(*e*) *Mechanics of Farm Machinery.*—Seventeen lecture periods and 6 laboratory periods.

This course will include 4 lectures on the elements of machines in their practical application to farm machinery and 10 lectures on the care, adjustment and operation of the more common farm machines, such as the plow, drill, mower, binder. Three lecture periods will also be given to practical work in tying knots, splicing rope and belt lacing.

Text-book (On Engineering Subjects) "Agricultural Engineering" (by J. M. Davidson.)

SECOND YEAR

(*a*) *Mechanical Drawing*—Seventeen periods.

Proper use of drawing instruments; exercise sheets, emphasizing accurate measurements, angles, curves and tangencies.

Working drawings of shop projects, embracing orthographic, isometric and cabinet projections.

Geometric constructions having practical applications will be taught incidentally. The drafting of plans for farm buildings. Tracing and blue-printing.

(*b*) *Carpentry and Building.*—17 lectures and 17 laboratory periods.

The lectures will be on the location, plans, and methods of construction of farm buildings; heating; lighting; ventilation; sanitation; water supply, storage and pumping machinery.

The laboratory periods will be devoted to practical work in the carpenter shop The regular exercises will consist of the following:—1, timber splice; 2, cutting rafters for gambrel and Gothic-roofed barns; 3, harness sewing clamp; 4 (optional exercises) small piece of furniture, ironing board or wagon jack.

Supplementary exercises will be given pupils showing unusual ability.

(*c*) *Blacksmithing.*—17 laboratory periods.

This will include more advanced forging and tool steel work. The exercises will include the following: review in welding, wrecking or claw bar, preparation of horse-shoes, plowshare work, filing and key-fitting, soldering, brazing, babbitting and pipe-fitting.

Farm Dairying

First Year

(*a*) *Milk Production.*—The composition and sanitary production of milk; the care and handling of milk and cream; the separation of cream and the use of the Centrifugal Cream Separator; the marketing of milk and cream for direct consumption and for manufacturing into cheese and butter; the provision and arrangement for cooling material and cooling facilities on the farm.

(*b*) *Milk Testing.*—The principle and use of the Babcock Test; the testing of milk and cream for butter fat; the keeping of records of the quantity and butter fat test of the milk production of individual cows and the utility of such records.

(*c*) *Butter-making.*—The handling of cream for butter-making; the churning, salting, working, packing and marketing of butter under farm conditions.

(*d*) *Legislation.*—The legal standards and other provisions which apply to the production and marketing of dairy products from the home dairy.

Second Year

(*a*) Review of the work covered during the first year, with additional and more advanced studies.

(*b*) *Cheese-making.*—The making of cheese in the home dairy.

(*c*) *Ice Cream.*—The making of Ice Cream under home dairy conditions.

Poultry Husbandry

FIRST YEAR
(17 Lectures)

(*a*) *Principles of Housing.*—The construction of poultry houses; interior fixtures and poultry appliances.

(*b*) *Natural and Artificial Incubation.*

(*c*) *Rearing.*—The feeding and management of young growing stock.

(*d*) *Feeds and Feeding.*—Laying rations, maintenance rations, fattening rations.

(*e*) *Winter Egg Production.*—Methods of feeding, care and general management.

(*f*) *Fattening.*— Methods of finishing; market requirements; killing, dressing and packing.

(*g*) *Breeding.*—Strain building; the care and management of breeding stock.

(*h*) *Marketing.*—A study of the factors influencing internal egg quality; co-operation as applied to the marketing of eggs and poultry.

Practical Work (10 Periods)

(*a*) *Judging Fowls.*—A study of egg-type and meat-type; the utility score card; practice in the judging of utility classes.

(*b*) *Egg Candling.*—Practice in the candling of market eggs, using the Official Canadian grade standards.

(*c*) *Incubator Practice.*—Actual operation of an incubator during the period of the course.

SECOND YEAR
(17 Lectures)

(*a*) *A Review of First Year Work.*

(*b*) *Hygiene and Sanitation in Relation to Poultry Culture.*

(*c*) *Poultry Breeding.*—A study of the principles of breeding; strain building; flock culling.

(*d*) *Breeds.*—A study of the principal utility breeds, their distinguishing characteristics and adaptibility to local conditions.

(*e*) *Diseases.*—The common diseases of poultry, their cause, prevention and cure.

(*f*) *Turkeys, Ducks, Geese.*—Methods of breeding, feeding, care and management.

Practical Work (10 Periods)

(*a*) *Egg Candling.*—A practical study of egg quality and the commercial grades.

(*b*) *Judging Fowls.*—Practice in flock culling; judging male and female classes.

(*c*) *Crate Fattening.*—Actual practice in crate fattening, killing, plucking and packing market poultry.

Horticulture

FIRST YEAR

(*a*) *Vegetable Culture.*

A study of the soil, fertilizing and cultural requirements of the leading vegetable crops and the best methods of harvesting, storing and marketing the same. It embraces the construction and management of hot beds and cold frames, the control of insects and diseases common to those crops and the methods followed for the improvement of various vegetable crops in order to secure desirable types.—14 lectures.

(*b*) *Small Fruits.*

A study of the origin and evolution of the different small fruits; saskatoons, cranberries, the strawberry, gooseberry, blackberry, currant and raspberry; soil and cultural requirements; the various phases of their management from the selection of plants to the harvesting of crop is dealt with.—6 lectures.

(*c*) *Forestry.*

Elementary principles of tree-planting; wind-breaks, ornamental trees and shrubs.—4 lectures.

SECOND YEAR

(*a*) *Amateur Floriculture.*

Elementary instructions in the care and management of some of the leading house plants; annual and perennial plants; bulb culture. 5 lectures.

(*b*) *Plant Propagation and Improvement.*

A study of the science and art of multiplying plants from seed and vegetable parts. The sowing of seeds and the study of their requirements during germination. Separation and division, layering cuttings and grafting will be treated specifically.—3 lectures.

(*c*) *Elementary Forestry.*

The growing of trees and shrubs in wind-breaks, wood-lots and for ornamental purposes.—9 lectures.

Chemistry

FIRST YEAR

1. Physical and chemical change.
2. Mechanical mixture. Elements and compounds.
3. Oxygen; oxidation, combustion; ozone.
4. Atomic theory.
5. Hydrogen; hydrogen peroxide; water.
6. Nitrogen; atmosphere.
7. Nitric acid; ammonia; oxides of nitrogen.
8. Solution and ionization.
9. Acids; bases; salts; neutralization.
10. Sulphur; phosphorus; matches; arsenic.
11. Valence; equations.
12. Sodium; baking soda; washing soda; potassium, and its important compounds.
13. Calcium and barium.
14. Chlorine, bromine and iodine.

Two lectures, one Laboratory per week.

Text-book—"First Course in Chemistry" (McPherson and Henderson).

SECOND YEAR

Organic Agricultural Chemistry

1. The element carbon; its occurrence, and inorganic compounds.

2. Organic chemistry, its importance and definition.

3. The paraffin series of hydrocarbons; their constitution and structure. The petroleum and paraffin industry; natural gas.

4. The halogen derivations of the paraffins. Synthesis of higher hydro-carbons.

5. Isomerism. Substitution products.

6. *Alcohols.*—Mono-, di-, and tri-hydroxy derivatives. Fermentation. Nitro-glycerine, dynamite and cordite.

7. *Aldehydes.*

8. *Acids.*—Fatty acid series. Polybasic acids.

9. Review of the paraffins, alcohols, aldehydes and acids, and their relationships.

10. Ethers and ethereal salts. Esterification.

11. *Fats.*—Hydrolysis and saponification. Soaps; butter and its substitutes. Hydroxy and amino acids.

12. *Proteins.*—Their relation to amino acids, properties and importance as foods.

13. *Carbohydrates.*—Their classification and importance. Sugars, starches, dextrin and cellulose. Gun cotton.

14. *Enzymes.*—Their functions and importance in fermentation, butter, cheese and bread making, and digestion.

15. Utilization of the essential elements and their functions; foodstuffs.

16. Digestion, absorption and metabolism.

17. Comparison of plants and animals. Photosynthesis.

18. Composition of crops and their food value.

The course in agricultural chemistry deals with systematic organic chemistry, in so far as that is necessary to understand the most important organic compounds. Especial emphasis is laid upon the three main classes of organic foodstuffs; carbohydrates, proteins and fats, their usefulness and place in the plant and animal body.

Two lectures and one laboratory per week.

Text-book—"Organic and Agricultural Chemistry", by Chamberlain.

Qualitative Analyses

(*a*) Nitrates; chlorides; phosphates; sulphates.

(*b*) Sodium; potassium; calcium iron; ferrous and ferrid salts; magnesium.

(*c*) Protein; fat; starch; sugars.

Physics

FIRST YEAR

2 lectures—1 laboratory.

1. Metric System.
2. Mechanics of levers, pulleys, etc.
3. Gravitation.
4. Pressure of liquids.
5. Buoyancy of fluids.
6. Determination of density.
7. Pressure of gases; barometer.
8. Cohesion; adhesion; surface; tension and capillarity.
9. Electricity, its nature; voltaic cell; dry cell; storage battery; motors and generators.

Text-book—"Ontario High School Physics".

SECOND YEAR

1. *Heat.*—Nature and source of heat.
2. Temperature and thermometry expansion.
3. Measurement of heat; specific heat; change of state; latent heat; refrigeration.
4. Transference of heat; conduction; convection; radiation.
5. Sound; wave motion.
6. Elementary climatology and meteorology.

Text-book—"Ontario High School Physics".

One lecture per week.

Soils

SECOND YEAR

1. Soil formation.
2. Classification of soils.
3. Physical properties: particles; apparent and real. Specific gravity; texture; structure.
4. Soil air.
5. Organic matter.
6. Color of soils.
7. Soil water.
    - (*a*) Different methods of determining and expressing amounts in soils.
    - (*b*) Requirements of plants.
    - (*c*) Kinds of water; capillary; hygroscopic; free.
    - (*d*) Control of.
8. Soil heat.
9. Soil fertility.
10. Manures and fertilizers.
11. Alkali and acid soils.
12. Soil and subsoil in humid and arid regions.
13. Soil management.

One lecture, one laboratory.

Reference—"Soils; Their Properties and Management" (By Lyon, Fippin, and Buckman.)

Botany

FIRST YEAR

1. Economic value of plants for food, forage, etc.
2. Seed germination; controlling influences.
3. The plant, vegetative parts and their functions,—respiration; transpiration; photosynthesis; osmosis.
4. Classification of plants.
5. The inflorescence; different types. Flower: its parts and their functions.
6. A systematic study of economic plants belonging to the following families: mustard, Canada thistle, grass, beet, carrot and rose.

7. Identification of weeds and weed seeds.

8. Identification and control of rusts and smuts.

One lecture, one laboratory period.

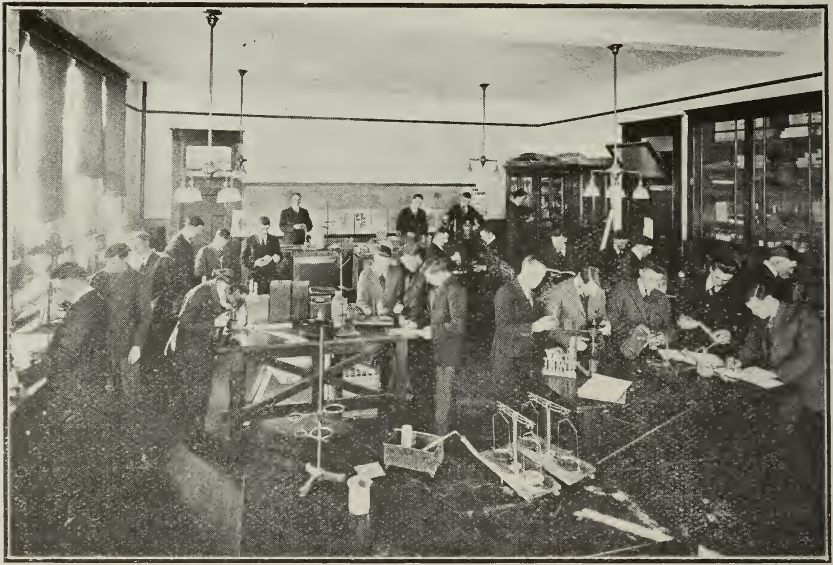
SECOND YEAR

1. Examination and study of students' collections.

2. Identification of weeds and weed seeds.

3. Plant ecology, ecological factors, classification of plants according to water supply.

4. Morphology: The plant cell, the stem of monocotyledons and dicotyledons.



Botany Class

5. Elements essential to plant life, water-cultures, sand cultures.

6. (*a*) Plant breeding, Mendel's Law, De Vries' Law.
   (*b*) Evolution.

7. Life history and identification of rusts and smuts, mildews, wilts, blights and scab.

8. Fungicides: formalin, copper sulphate, Bordeaux mixture, and bichloride of mercury.

One lecture, one laboratory period.

Text-book—"Agricultural Botany" (Percival).

Entomology

FIRST YEAR ONLY

1. (*a*) Place of the insect in the animal kingdom.
   (*b*) Difference between insects and their near relatives.

2. *Anatomy*—
   Head; biting and sucking mouth parts.
   Thorax and abdomen: circulatory, respiratory and alimentary systems.

3. *Classifications*—
   Important economic orders: bugs, flies, moths and butterflies, beetles, grass-hoppers and bees.

4. (*a*) Life history of cutworms, wireworms, Hessian fly, saw fly, potato beetle, ox-warble, horse fly, house fly, plant lice, red-backed turnip beetle, grasshoppers, beet web-worm and leaf-eating beetles.
   (*b*) Near relatives of insects, such as ticks, mites and fleas.

5. Insecticides; Poisoned Bordeaux.
   Paris Green water, Hellibore.
   Pyrthrum, Kerosene emulsion.
   Whale-oil, soap, arsenate of lead.

One lecture and one laboratory period.

Farm Management

FIRST YEAR—1 lecture

1. History of agriculture.

2. Types of farming and factors governing type—Specialized and general, intensive and extensive—Exploitive and restorative.

3. Choosing a farm, location, soil, climate, precipitation, vegetation, improvements and their value.

4. Various forms of tenure, share and cash renting, owning.

5. Farm layout.

6. Farm cost accounting; its value; inventory; farm accounts; receipts; expenses; summary of year's business; profit and loss.

7. Estimation of income tax.

Farm Management and Economics

SECOND YEAR—2 lectures.

1. Evolution of types of agriculture; self-sufficing; commercial; scientific.

2. Fundamental nature of agriculture in relation to manufacturing, transportation, merchandising.

3. Factors in production:—
    (*a*) Land; large and small farms; cheap and expensive land, diminishing returns.
    (*b*) Labor; influences affecting cost, efficiency, permanency, etc.
    (*c*) Capital; sources of capital, loans, mortgages, organized credit, permanent and operating; amount required in various types of farming.

4. Production; relation of cost of production to value, market value, supply and demand, cycles in agriculture.

5. Labor income.—Effect of the size of farm business, yearly supply of labor, economic arrangement of crops with regard to maximum use of horses and machinery; balance between cash crops and live stock, animal units; production per animal, crop yield; diversity.

6. Commercial paper: drafts, mortgages, deeds, wills, contracts, notes, abstracts, cheques, money orders, etc.

7. Insurance; life, fire, accident, hail and disease.

8. The bank credit.

9. Analysis of some successful farmer's business.

English

FIRST YEAR

Composition—Two periods of forty minutes—34 periods.

1. *Capitalization and Punctuation.*—Use of period, comma, interrogation and exclamation marks, semi-colon, colon, apostrophe, and quotation marks.

Exercises in punctuation, spelling, and writing. Careful correction of all errors in speech and written work.

2. *The Sentence.*—Form of simple sentences—statement, question, exclamation and command. Simple, complex, and compound sentences.

Oral and written exercises on sentence structure.

Correction of faulty sentences and grammatical errors.

3. *The Paragraph.*—The topic statement and its development into the paragraph. Unity and coherence in the paragraph. Study of simple paragraphs illustrating paragraph development. The outline or paragraph plan. Value of paragraphing.

Exercises on familiar topics.

4. *The Whole Composition.*—Connecting of paragraphs or continuity; unity and coherence in composition.

Simple plans and exercises.

5. *Correspondence.*—Letter forms; business letters; friendly letters; social letters; advertisements; telegrams.

6. Use of dictionary and reference works.

7. *Public Speaking.*

Literature.—One period of forty minutes.—Seventeen periods.
Poetry.—"Evangeline" (Longfellow).
Prose.—"Sharp Eyes, and other Essays" (Burrows).
Home Reading.—"Adventures in Contentment" (Grayson); "Treasure Island" (Stevenson).

SECOND YEAR

Composition.—Two periods of forty minutes—34 periods.

1. Review of composition of first year.

2. *The Sentence.*—Study of it in relation to form and grammatical structure. Study of rhetorical values of sentences. Unity, coherence and emphasis in sentences, and how or how not secured.

3. *The Paragraph.*—Critical study of the paragraph. Exercises on paragraph planning and writing. Careful correction of all exercises. Value of unity, coherence, and emphasis in paragraphs. Length of paragraphs.

4. *The Whole Composition.*—Narration, description, exposition and argument. A study of each with plans and exercises.

5. *Words.*—Study of choice and use of words. Homonyms, synonyms and antonyms in brief.

6. Public speaking and debating.

Literature.—One period of 40 minutes—17 periods.
Scott—"The Lady of the Lake."
Macaulay—"Warren Hastings."
Home Reading: "The Tale of Two Cities" (Dickens).
"Outlook to Nature" (Bailey).

Farm Mathematics

FIRST YEAR

Simple Processes.—Review and rapid drills on addition, subtraction, multiplication, division, simple fractions, vulgar fractions and decimal fractions.

Tables.—Time, money, weight; simple mensuration applied to solving problems arising in farm and household experience.

Commercial Arithmetic.—Profit and loss, simple interest, commission, taxes, insurance, special attention to the practical problems of the farm and home.—Two lectures.

SECOND YEAR

REVIEW OF FIRST YEAR

Mensuration.—

Estimating areas of land, floors, walls, roofs, etc., and of volume in rectangular and circular forms, such as bins, tanks, silos, cisterns and capacity of buildings.

Commercial Arithmetic.—

Taxes, insurance, duties, bank discount and partial payments.

Calculation based on buying and selling operations with grain, live stock, dairy and poultry products, building and fencing materials, feeds and household necessities.

Two lectures.

Bacteriology

SECOND YEAR ONLY—1 lecture

1. Position of bacteria in the organic world.
2. Form, size, structure and motility.
3. Reproduction, spore formation.
4. Conditions influencing bacterial growth.
    (*a*) *Physical.*—Temperature, moisture, air, light, pressure.
    (*b*) *Chemical.*—Food, kind and amount.
    (*c*) *Biological.*—Relation to other organisms—symbiosis.
5. Bacteria in the air—dust and its influence on health.
6. Bacteria in relation to water.
    (*a*) Contamination of water in different ways. Purification of water.
    (*b*) Bacteria in different types of wells.
7. Bacteria in milk and its products.
    (*a*) Milk as a medium for bacterial development.
    (*b*) Sources of bacteria in milk.
    (*c*) Prevention of contamination and the production of clean milk.
    (*d*) Disease bacteria in milk.
    (*e*) Bacteria in butter-making and cheese-making.
8. Bacteria in relation to septic tanks.

BOYS

9. Bacteria in relation to soil fertility.
    (*a*) Numbers and distribution in soil.
    (*b*) Relation to humus and decomposition of organic matter.

(*c*) Transformation of soil nitrogen.
(*d*) Nitrogen fixation.
(*e*) Inoculation of soil for the growing of legumes.
(*f*) Relation of bacteria to available plant food.

GIRLS

10. Relation of bacteria to preservation of food, canning, drying, pickling, salting, smoking.
11. Micro-organisms in bread-making.
12. Vinegar-making.

Civics

SECOND YEAR ONLY—1 lecture

Municipal Organization.—The bases of community organization, primitive and modern. Careful study of community organization represented in the services and powers of Local Improvement Districts, Rural Municipalities, Villages, Towns and Cities, School Districts, Rural School Consolidations, Fairs and Exhibitions. The discussion of selected portions of empowering legislation with respect to these; duties and privileges of citizens under this legislation; official bodies. Brief reference to organizations of a voluntary kind not established by government sanction, such as church, social and patriotic organizations, associations for production, purchasing and marketing.

The Provincial Government.—Studied primarily through services furnished by administrative departments; Railways and Telephone; Public Works; Municipal Affairs; Agriculture; Education; Attorney-General; Treasury; Provincial Secretary and Public Utilities Commission; special emphasis on Departments of Agriculture and Education. The Alberta Act; Constitution of the Provincial Government,—Lieutenant-Governor, Legislative Assembly and Executive Council; qualifications of voters and members of the Legislature; elections.

The Dominion Government.—Services of the Dominion Government closely affecting agriculture. Division of powers between Federal and Provincial Governments; basis of division, subjects of concurrent jurisdiction. The constitution of the Dominion Government,—Governor-General, Senate, House of Commons and the Executive Council; Qualifications of members and voters; elections.

Physical Culture

Attention will be given to physical development throughout the course.

O. S. A. Hockey Team

Class in Gymnastics

Home Economics

Course of Study

FIRST YEAR

1. Cooking.
2. Foods.
3. Physiology and Anatomy.
4. Home Nursing.
5. Sewing.
6. Textiles.
7. Embroidery.
8. Laundry.
9. Household Administration.
10. Sanitation.
11. English.
12. Mathematics.
13. Horticulture.
14. Home Dairying.
15. Poultry
16. Elementary Chemistry.
17. Physical Culture.

SECOND YEAR

1. Cooking.
2. Dietetics.
3. Hygiene.
4. Home Nursing.
5. Sewing.
6. Textiles.
7. Household Administration.
8. Home Book-keeping.
9. English.
10. Mathematics.
11. Horticulture.
12. Home Dairying.
13. Poultry.
14. Bacteriology.
15. Household Chemistry.
16. Civics.
17. Physical Culture.

Outline of Courses

FIRST YEAR

Foods.—Three lectures and three laboratory periods per week.

1. Cooking—
   Planning, preparation and serving of family meals, that is, breakfast, dinner and supper.
2. Study of Foods—
   - (*a*) Food essentials.
   - (*b*) Detailed study of foodstuffs such as cereals, milk, vegetables, fruits, eggs, meat.
3. Table Service—
   - (*a*) General rules for laying covers.
   - (*b*) General rules for serving and removing courses.
   - (*c*) Styles of service.

SECOND YEAR

Foods—Two lectures and three laboratory periods per week.

1. Cookery—
   - (*a*) Canning, preserving, pickling, jelly-making.
   - (*b*) Making of dishes including croquettes, frozen dishes, souffles, Christmas cakes, gelatine dishes, bread mixture.
   - (*c*) Individual work in planning, preparation and serving meals.
   - (*d*) Experimental cookery—comparative values of varieties of vegetables, fruits, cereals; testing of different combinations of flour mixtures.
2. Dietetics—
   - (*a*) Determining food values.
   - (*b*) Dietaries under normal conditions.
   - (*c*) Infant-feeding.
   - (*d*) Child-feeding.
   - (*e*) Diet in abnormal conditions such as malnutrition, diabetes, tuberculosis.
3. Marketing—
   - (*a*) Proper selection.
   - (*b*) Economic buying (of fresh, canned and desiccated fruits, vegetables and meats.)
   - (*c*) Home storage.

FIRST YEAR

Clothing—Two lectures and four laboratory periods per week.

1. Sewing—
   - (*a*) Instructions in sewing processes, stitches, seams, hems, plackets, button holes, decoration.
   - (*b*) Uses and modifications of commercial patterns.
   - (*c*) Making of set of undergarments, plain blouse and summer dress.
2. Textiles—
   - (*a*) Study of fabrics.
   - (*b*) Manufactures of fabrics.
   - (*c*) Determining quality of fabrics.
3. Laundry—
   - (*a*) Removal of stains.
   - (*b*) Laundering of fabrics, cotton, linen, silk.
   - (*c*) Methods of dry cleaning.
   - (*d*) Soap-making.

Practical Class in Sewing

SECOND YEAR

Clothing—One lecture and three laboratory periods per week.

1. Sewing—
   - (*a*) Continuation of instructions on sewing processes, tailored seams, pockets, bound button-holes, decoration, etc.
   - (*b*) Alterations and adaptations of patterns.
   - (*c*) Construction of garments—tailored waists, tailored skirts, made-over garments, graduation dress, infant layette.
2. Clothing and design—
   - (*a*) The principles of clothing design.
   - (*b*) Hygiene of clothing.
   - (*c*) Economic aspect of clothes.

FIRST YEAR

Household Administration—Two lectures and one laboratory period per week.

1. Cleaning processes—metals, wood and enamel.
2. Sanitation of the house—plumbing, heating, lighting.
3. Equipment of house centres—kitchen, dining-room, living-room, etc. Labor-saving devices.

SECOND YEAR

Household Administration—Two lectures and one laboratory period per week.

1. House planning—
   - (*a*) Analysis of house.
   - (*b*) Arrangement of rooms.
   - (*c*) Finishes.
   - (*d*) Decoration.
   - (*e*) Furnishings.
2. Household Accounts—
   - (*a*) Simple business forms.
   - (*b*) Practical work in home accounts.
   - (*c*) Household budget.

Anatomy and Physiology—One lecture period per week.

1. Framework of body—Skeleton, bones, joints.
   Muscular system—relation to skeletal system.
   Circulation system.
   Respiratory system.
   Digestive system.
   Excretory system.
   Nervous system.

Each topic to be discussed from the point of view of function and hygiene.

Home Nursing—One laboratory period per week.

1. Preparation of sick room—
   The choice, furnishings, and care of room.
2. Bed-making—
   - (*a*) Making of bed for bed-patient.
   - (*b*) Changing of bed linen with helpless patient in bed.
   - (*c*) Changing of bed linen after case of intestinal hæmorrhage.
   - (*d*) Preparation of fracture bed.
   - (*e*) Changing of mattress with patient in bed.
3. Care of Patient—
   - (*a*) Care of hair, teeth, nails, etc.
   - (*b*) The bathing of a patient.
   - (*c*) How to avoid bed sores.
   - (*d*) The use of sick-room appliances.
   - (*e*) The giving of enemata, etc.
   - (*f*) Feeding the patient.
4. Sponging for reduction of temperature.
5. How to administer cold and hot packs. When and for what purpose they should be given.
6. The proper method of making and applying poultices, fomentations, stupes, etc.
7. Taking of temperature, pulse and respiration.
8. Administration of Medicines—
   - (*a*) Care of medicines.
   - (*b*) Measuring.

(*c*) Rules to be remembered in giving medicines.
(*d*) The different methods of giving medicines, viz.,—
Hypodermic, epidermic, etc.

9. Charting.

10. *Emergencies*—First Aid—
    (*a*) Treatment of scalds and burns.
    Treatment of frost bites, shock, drowning, etc.
    (*b*) Treatment of asphyxiation caused by gas, smoke, etc.
    (*c*) Treatment of wounds, contusions, hæmorrhages, sprains, fractures, and dislocations.
    (*d*) Removal of foreign bodies from eye, ear, nose and throat.
    (*e*) Antidotes and treatment of most common poisons.

SECOND YEAR.

Home Nursing—One laboratory period per week.

1. Obstetrics—
    (*a*) Preliminary care of patient.
    (*b*) Preparation of all necessary requisites for the mother, child and doctor.
    (*c*) The observation of symptoms, making of obstetric bed.
    (*d*) Duties of the nurse.
    (*e*) After-care of mother, diet, etc.

2. Care of Infant—

Bathing, dressing, feeding, etc

3. Nursing of contagious and infectious diseases, viz.,—Diphtheria, scarlet fever, smallpox, measles, chickenpox, typhoid fever, pneumonia, etc.—their period of incubation, symptoms, time of isolation, precautionary methods necessary in nursing of patients. Treatment until arrival of doctor.

4. Bandages and bandaging—

Materials used, demonstrations on the three forms of bandages used, viz.:—the spiral, reverse, and figure of 8. Bandaging of head, shoulder, arm, wrist, fingers, leg, knee, foot, etc. The many-tailed bandages.

The different types of slings and their uses.

5. Disinfection—
   Of clothing, utensils and room.

Personal Hygiene—One lecture period per week.

Selected topics dealing with the more important phases of personal hygiene.

Chemistry

FIRST YEAR

See outline for Agricultural Students.

SECOND YEAR

1. Organic Agricultural Chemistry—see outline for agricultural students.

2. Textiles—Identifications of and tests for fibres. Blueing; dyeing; preservatives; adulterants; fuels and light. Hard water and methods of softening. Baking powder.

3. Qualitative analyses as outlined for agricultural students.
   Text-book—" Elementary Household Chemistry " (Snell).

Bacteriology

SECOND YEAR

The importance and relation of bacteria in the household; the relation of bacteria to temperature, air and food; their method of production; ferments.

The action of bacteria usually found in milk, butter and cheese; diseased germs that may be found in milk; the pasteurization and sterilization.

English

FIRST YEAR

See outline for Agricultural Students.

SECOND YEAR

See outline for Agricultural Students.

Dairying

See outline for first and second year Agricultural Students.

Poultry

See outline for first and second year Agricultural Students.

Horticulture

See outline for first and second year Agricultural Students.

Mathematics

See outline for first and second year Agricultural Students.

Civics

See outline for second year Agricultural Students.

Farm Chemistry at First hand

Outfit Requirements

Work Dresses—Two are needed for practical work in the kitchen and laundry. These are made of blue chambray (at 45c. per yard) a sample of which may be obtained at the School and which may be purchased in any of the towns in which the Schools are situated. Patterns for work dresses may also be obtained at these places (20c). The material is 36 inches wide and should be shrunken before being made up.

Directions for Making Dresses—The dresses must be made as plain as possible, preferably with skirt and waist joined with a band an inch and a half wide. The skirt must be at least 5 inches from the floor and finished with a three-inch hem having no frills or trimming. They must also be perfectly plain with short sleeves reaching just below the elbow with turn-back cuff; the neck to be finished with a narrow band with which may be worn a plain detachable white collar.

Aprons—Three are needed for cooking. These may be made of linen, heavy lawn, or cotton. They must be made before the student arrives at the school. Make them having no trimmings; bibs and shoulder straps buttoned to band of apron at the back.

All aprons must be plain and of white material.

Hand Towels—Four small, white, half a yard long, having button-hole or tape, with which to fasten to band of apron.

Pot-holders—Two. Six inches square, covered with dress material, bound with a bias piece of material, and having attached to one corner, three-quarters of a yard of white tape with which to fasten to button or apron band.

Sewing Requisites—Each student must have a large work-bag equipped with scissors, tape line, needles, thimbles, pins.

Suits for Physical Culture—May be made at the School. The girls to provide their own material.

Books—Few will be required—those necessary may be obtained at the School.

Note:—

(1) The students supply their own materials for sewing class, but keep the finished articles for their own use.

(2) The students are requested to have their names worked plainly on aprons and towels.

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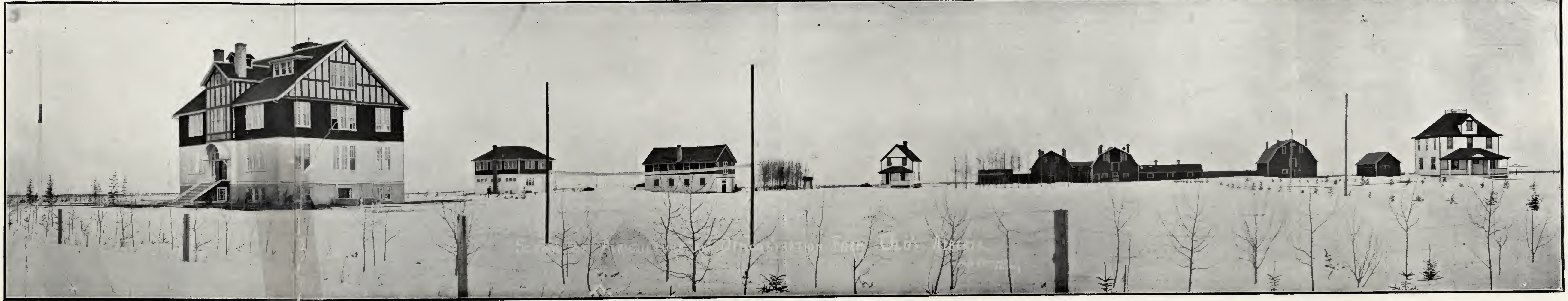
APPLICATION FOR ADMISSION TO THE PROVINCIAL SCHOOL OF AGRICULTURE

.... P.O.

Please state whether board and room will be required during the school term.

(Kindly Return Promptly.)



BUILDINGS AND EQUIPMENT ARE IDENTICAL AT ALL SCHOOLS

APPLICATION FOR ADMISSION TO THE PROVINCIAL SCHOOL OF AGRICULTURE

.... P.O.

Date ....

THE PRINCIPAL,
School of Agriculture.

Sir:

I hereby apply for admission to the.................................. School of Agriculture. If admitted, I agree to abide by the rules and regulations outlined in the School Calendar.

Yours truly,

....

(*Name of Applicant.*)

CARD OF INFORMATION.

Name in full ....

Home address ....

Age ....

Place of Birth ....

Do you smoke or chew tobacco? ....

Do you use intoxicating liquors? ....

Parent or guardian:

- (*a*) Name ....
- (*b*) Address ....
- (*c*) Occupation . ...

Education—Length of attendance in:

- (*a*) Public School. ....
- (*b*) High School ....
- (*c*) Other Schools. ....

Practical work on farm (for boys only):

- (*a*) Date ....
- (*b*) Place ....

Please state whether board and room will be required during the school term.

(*Kindly Return Promptly.*)

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